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212024

SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT 68-W5-0019

START-02-F-01879

TRANSMITTAL MEMO

To: Eric Wilson, OSC
Removal Action Branch, U.S. EPA Region II

From: Yunru Yang - Data Reviewer
START Region II

Subject: Cornell-Dubilier Electronics Site
South Plainfield, Middlesex County, NJ
Data Validation Assessment

Date: June 09, 1998

The purpose of this memo is to transmit the following information:

- Data validation results for the following parameters:

  TCL-PCB 13 samples

- Matrices and Number of Samples:

  Soil/Sediment 13 samples

- Sampling date: 28 March 1998

The final data assessment narrative and original analytical data package are attached.

cc: START Project Manager: Michael Mahnkopf
START FILE TDD #: 02-97-09-0015
Analytical TDD #: 02-98-03-0035
PCS #: 2505

U.S. ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

DATE: **16 June 1998**

TO: **Eric Wilson, OSC**
USEPA Region II

FROM: **Yunru Yang**
START Data Review Team

SUBJECT: **QA/QC Compliance Review Summary**

As requested quality control and performance meausres for the data packages noted have been examined and compared to EPA standards for compliance. Measures for the following general areas were evaluated as applicable:

Data Completeness	Blanks
Holding Times	Surrogate Splikes
Matrix Spikes/Duplicates	Calibrations
Chromatography	Compound Identification

Any statistical measures used to support the following conclusions are attached so that the review may be performed by others.

Summary of Results	I VOA	II BNA	III PCB	IV HERB
Acceptable as Submitted				
Acceptable with Comments			X	
Unacceptable, Action Pending				
Unacceptable				

Data Reviewed by: Kanita Sumbry for Yunru Yang Date: 7/13/98

Approved By: Jim Scott Date: 7/13/98

Area Code/Phone No.: (908) 225-6116

NARRATIVE

Case No. 2505

SITE NAME: **Cornell-Dubilier Electronics**
South Plainfield, Middlesex County, NJ

Laboratory Name: **ICM Laboratories**

INTRODUCTION:

The laboratory's portion of this RFP consisted of 13 samples collected on 28 March 1998.

The laboratory reported no problems with the receipt of these samples and no problems with the analyses of these samples for PCB.

The evaluator has commented on the criteria specified under each fraction heading. All criteria have been assessed, but no discussion is given where the evaluator has determined that criteria were adequately performed or require no comment. Details relevant to these comments are given on the forms followed.

Evaluation by Fraction:

Y Holding Times	Y Calibration
Y Blank	Y Surrogate Recovery
Y MS/MSD	Y Retention Time Windows
Y Compound Identification	Y Analytical Sequence
Y Chromatography	Y Retention Time Check for Surrogates

Comments: Refer to Data Assessment Report

NARRATIVE

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Y Compound Identification	Y Analytical Sequence
Y Chromatography	Y Retention Time Check for Surrogates

Comments: Refer to Data Assessment Report

CLP DATA ASSESSMENT

Functional Guidelines for Evaluating Organic Analysis

RFP No.: 2505 **SDG No.: CD-01**
LABORATORY: ICM
SITE: Cornell-Dubilier Electronics

DATA ASSESSMENT

The current SOP HW-6 (Revision 11) June 1996, USEPA Region II Data Validation SOP for Statement of Work OLMO 3.2. for evaluating organic data have been applied.

All data are valid and acceptable except those analytes rejected "R"(unusable). Due to the detection of QC problems, some analytes may have the "J" (estimated), "N"(presumptive evidence for the presence of the material, "U" (non-detect) or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All action is detailed on the attached sheets.

The "R" flag means that the associated value is unusable. In other words, significant data bias is evident and the reported analyte concentration is unreliable.

Reviewer's Signature: Yunru Yang **Date:** 06/ 09/1998

Verified By: _____ **Date:** __/__/199_

CLP DATA ASSESSMENT

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following action was taken in the samples and analytes shown due to excessive holding time.

None

2. SURROGATES

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below.

None

3. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

The laboratory spiked pesticides, instead of Aroclors, for the MS/MSD analyses. The recoveries of the pesticides could not be used for qualifying PCB results.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. If the concentration of the analyte is less than 5 times the blank contaminant level (10 times for common contaminants), the analytes

are qualified as non-detects, "U". The following analytes in the sample shown were qualified with "U" for these reasons:

A) Method blank contamination:

None

B) Field or rinse blank contamination:

Not collected

C) Trip blank contamination:

Not applicable

D) Storage Blank

Not applicable.

E) Tics "R" rejected

Not applicable

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatiles Decafluorotriphenyl-phosphine (DFTPP).
If the mass calibration is in error, all associated data will be classified as unusable "R".

Not applicable

6. CALIBRATION:

CLP DATA ASSESSMENT

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be $\geq$ 0.05 in both initial and continuing calibrations. A value < 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be rejected "R".

Not applicable

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be < 30% and %D must be < 25%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detects data may be qualified "R".

For the PEST/PCB fraction, if %RSD exceeds 20% for all analytes except for the two surrogates (which must not exceed 30% RSD), qualify all associated positive results "J" and non-detects "UJ".

The following analytes in the sample shown were qualified for %RSD and %D:

CLP SOW OLM03.1 was used by the laboratory for sample analysis; however, the laboratory did not modify the analytical sequence by calibrating the Aroclor standard(s). As a result, an one-point calibration was performed for all the PCBs. The following Aroclor results were qualified as estimated (J):

Aroclor 1260 in CD-04, CD-07, and CD-08

CLP DATA ASSESSMENT

Aroclor 1254 in CD-07 and CD-08

No samples were qualified for not meeting the continuing calibration verification requirements.

8. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than ±30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, the reviewer will use professional judgement to determine either partial or total rejection of the data for that sample fraction.

Not applicable

9. COMPOUND IDENTIFICATION:

A) Volatile and Semi-Volatile Fractions:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

Not applicable

B) Pesticide Fraction:

CLP DATA ASSESSMENT

The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract.

GC/MS confirmation was not performed.

The identification of PCBs relies more on the pattern recognition than on the retention time windows. The concentrations of a particular Aroclor from the two columns were compared and. The lower value shall be reported. The %D of the two values was calculated. If the %D is >50% between the two values, the Aroclor result will be qualified as estimated.

Other than Aroclor 1260, samples CD-07 and CD-08 also contained Aroclor 1254 which was not reported by the laboratory. The peaks (less than 5) unique to each Aroclor were used by the data validator to recalculate the concentrations of the Aroclors. The results of Aroclor 1254 and Aroclor 1260 in CD-07 and CD-08 were qualified as estimated for the interferences from each other could not be avoided.

10. CONTRACT PROBLEMS NON-COMPLIANCE:

None

11. FIELD DOCUMENTATION:

No problems noticed

12. OTHER PROBLEMS

None

13. This package contains re-extractions, reanalyses or dilutions. Upon reviewing the QA results, the following Form 1(s) are identified to be used.

Not applicalbe

OTHER ANALYSIS WORK TABLE

Project: Cornell-Dubilier Electronics

Sampling Date: March 28, 1998

Sample Concentration (µg/Kg)

PCBs Low Concentration Percent Moisture Dilution Factor	Method Detection Limit	Soil CD-01 286621 18 1	Soil CD-02 286622 14 1	Soil CD-03 286623 16 1	Soil CD-04 286624 22 1	Soil CD-05 286625 17 1	Soil CD-06 286626 15 1	Soil CD-07 286627 21 1	Soil CD-08 286628 25 1	Soil CD-09 286629 25 1	Soil CD-10 286630 25 1	Soil CD-11 286631 22 1	Soil CD-12 286632 23 1	Soil CD-13 286633 23 1
Aroclor 1016	33	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1221	33	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1232	33	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1242	33	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1248	33	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1254	33	U	U	U	U	U	U	76 J	50 J	U	U	U	U	U
Aroclor 1260	33	U	U	U	140 J	U	U	61 J	53 J	U	U	U	U	U

U - non-detected compound
J - estimated value

METHODOLOGY SUMMARY

SOILS:

Pesticides/PCBs: REFERENCE-USEPA CLP SOW for Organic Analysis, Multi-Media, Multi-Conc., OLM03.1, 8/94. Approximately 30 grams of sediment is mixed with sodium sulfate and extracted three times with 1:1 acetone/methylene chloride using an ultrasonic probe. The extracts are combined, concentrated and subject to GPC clean up. The extract is then solvent exchanged to hexane, cleaned up by Florisil cartridge and adjusted to a final volume of 2.0 ml. The extract is then analyzed by GC.

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, New Jersey 07869
973-584-0330

SDG No. CD-01

Samples: 286621 - 286633

NONCONFORMANCE SUMMARY

Pesticide/PCB:

1) Columns : a) J & W Scientific, DB608, 30m x 0.53 mm, 0.83 film thickness
b) J & W Scientific, DB1701, 30 m x 0.53 mm, 1.0 film thickness

2) Symbols used on Pesticide/PCB quantitation reports:

OW = Outside of retention window
NC = Not confirmed by secondary column
<CRQL = Less than Contract Required Quantitation Limit
<0.5 CRQL = Less than one half the Contract Required Quantitation Limit
NP = No Pattern present

3) Manual integrations were performed on a number of samples and standards due to incorrect integration by the quantitation program.

4) Inadvertantly, the GPC Pest Check was spiked with 1ml. of GPC Calibration Check Solution instead of 2mls. As a result, the concentrations found in the Pest Check were one-half the normal amount.

5) The following compounds had recoveries outside the QC limits in the matrix spike: Aldrin (136%) and 4,4'-DDT (147%). The following compounds had recoveries outside the QC limits in the matrix spike duplicate: Aldrin (155%), Dieldrin (137%), and 4,4'-DDT (158%). As per the SOW, no further action was required.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Thomas Mancuso
Laboratory Manager

4/16/98
Date

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-01

Lab Name: ICM Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: CD-01

Matrix: (soil/water) SOIL Lab Sample ID: 286621

Sample wt/vol: 30.0 (g/mL) G Lab File ID: HA3711

% Moisture: 18. decanted: (Y/N) N Date Received: 03/28/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/29/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 04/09/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	41.	U
11104-28-2	Aroclor-1221	41.	U
11141-16-5	Aroclor-1232	41.	U
53469-21-9	Aroclor-1242	41.	U
12672-29-6	Aroclor-1248	41.	U
11097-69-1	Aroclor-1254	41.	U
11096-82-5	Aroclor-1260	41.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-02

Lab Name: ICM Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: CD-01

Matrix: (soil/water) SOIL Lab Sample ID: 286622

Sample wt/vol: 30.0 (g/mL) G Lab File ID: HA3692

% Moisture: 14. decanted: (Y/N) N Date Received: 03/28/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/29/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 04/08/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	39.	U
11104-28-2	Aroclor-1221	39.	U
11141-16-5	Aroclor-1232	39.	U
53469-21-9	Aroclor-1242	39.	U
12672-29-6	Aroclor-1248	39.	U
11097-69-1	Aroclor-1254	39.	U
11096-82-5	Aroclor-1260	39.	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-03

Lab Name: ICM Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: CD-01

Matrix: (soil/water) SOIL Lab Sample ID: 286623

Sample wt/vol: 30.0 (g/mL) G Lab File ID: HA3693

% Moisture: 16.1 decanted: (Y/N) N Date Received: 03/28/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/29/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 04/08/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	40.	U
11104-28-2	Aroclor-1221	40.	U
11141-16-5	Aroclor-1232	40.	U
53469-21-9	Aroclor-1242	40.	U
12672-29-6	Aroclor-1248	40.	U
11097-69-1	Aroclor-1254	40.	U
11096-82-5	Aroclor-1260	40.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-04

Lab Name: ICM Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: CD-01

Matrix: (soil/water) SOIL Lab Sample ID: 286624

Sample wt/vol: 30.1 (g/mL) G Lab File ID: HA3694

% Moisture: 22.1 decanted: (Y/N) N Date Received: 03/28/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/29/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 04/08/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	43.	U
11104-28-2	Aroclor-1221	43.	U
11141-16-5	Aroclor-1232	43.	U
53469-21-9	Aroclor-1242	43.	U
12672-29-6	Aroclor-1248	43.	U
11097-69-1	Aroclor-1254	43.	U
11096-82-5	Aroclor-1260	140.	J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-05

Lab Name: ICM Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: CD-01

Matrix: (soil/water) SOIL Lab Sample ID: 286625

Sample wt/vol: 30.1 (g/mL) G Lab File ID: HA3697

% Moisture: 17 decanted: (Y/N) N Date Received: 03/28/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/29/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 04/08/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	40.	U
11104-28-2	Aroclor-1221	40.	U
11141-16-5	Aroclor-1232	40.	U
53469-21-9	Aroclor-1242	40.	U
12672-29-6	Aroclor-1248	40.	U
11097-69-1	Aroclor-1254	40.	U
11096-82-5	Aroclor-1260	40.	U

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-06

Lab Name: ICM Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: CD-01

Matrix: (soil/water) SOIL Lab Sample ID: 286626

Sample wt/vol: 30.0 (g/mL) G Lab File ID: HA3698

% Moisture: 15./ decanted: (Y/N) N Date Received: 03/28/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/29/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 04/08/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	39.	U
11104-28-2	Aroclor-1221	39.	U
11141-16-5	Aroclor-1232	39.	U
53469-21-9	Aroclor-1242	39.	U
12672-29-6	Aroclor-1248	39.	U
11097-69-1	Aroclor-1254	39.	U
11096-82-5	Aroclor-1260	39.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-07

Lab Name: ICM Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: CD-01

Matrix: (soil/water) SOIL Lab Sample ID: 286627

Sample wt/vol: 30.1 (g/mL) G Lab File ID: HA3699

% Moisture: 21. decanted: (Y/N) N Date Received: 03/28/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/29/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 04/08/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	42.	U
11104-28-2	Aroclor-1221	42.	U
11141-16-5	Aroclor-1232	42.	U
53469-21-9	Aroclor-1242	42.	U
12672-29-6	Aroclor-1248	42.	U
11097-69-1	Aroclor-1254	76 ~~42.~~	~~U~~ J
11096-82-5	Aroclor-1260	61 ~~79.~~	J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-08

Lab Name: ICM Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: CD-01

Matrix: (soil/water) SOIL Lab Sample ID: 286628

Sample wt/vol: 30.1 (g/mL) G Lab File ID: HA3700

% Moisture: 25. / decanted: (Y/N) N Date Received: 03/28/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/29/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 04/08/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	44.	U
11104-28-2	Aroclor-1221	44.	U
11141-16-5	Aroclor-1232	44.	U
53469-21-9	Aroclor-1242	44.	U
12672-29-6	Aroclor-1248	44.	U
11097-69-1	Aroclor-1254	50 ~~44.~~	~~U~~ J
11096-82-5	Aroclor-1260	53 ~~66.~~	J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-09

Lab Name: ICM Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: CD-01

Matrix: (soil/water) SOIL Lab Sample ID: 286629

Sample wt/vol: 30.1 (g/mL) G Lab File ID: HA3701

% Moisture: 25./ decanted: (Y/N) N Date Received: 03/28/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/29/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 04/08/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	44.	U
11104-28-2	Aroclor-1221	44.	U
11141-16-5	Aroclor-1232	44.	U
53469-21-9	Aroclor-1242	44.	U
12672-29-6	Aroclor-1248	44.	U
11097-69-1	Aroclor-1254	44.	U
11096-82-5	Aroclor-1260	44.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-10

Lab Name: ICM Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: CD-01

Matrix: (soil/water) SOIL Lab Sample ID: 286630

Sample wt/vol: 30.1 (g/mL) G Lab File ID: HA3702

% Moisture: 25. decanted: (Y/N) N Date Received: 03/28/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/29/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 04/08/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	44.	U
11104-28-2	Aroclor-1221	44.	U
11141-16-5	Aroclor-1232	44.	U
53469-21-9	Aroclor-1242	44.	U
12672-29-6	Aroclor-1248	44.	U
11097-69-1	Aroclor-1254	44.	U
11096-82-5	Aroclor-1260	44.	U

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-11

Lab Name: ICM Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: CD-01

Matrix: (soil/water) SOIL Lab Sample ID: 286631

Sample wt/vol: 30.1 (g/mL) G Lab File ID: HA3703

% Moisture: 22.1 decanted: (Y/N) N Date Received: 03/28/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/29/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 04/08/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	43.	U
11104-28-2	Aroclor-1221	43.	U
11141-16-5	Aroclor-1232	43.	U
53469-21-9	Aroclor-1242	43.	U
12672-29-6	Aroclor-1248	43.	U
11097-69-1	Aroclor-1254	43.	U
11096-82-5	Aroclor-1260	43.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-12

Lab Name: ICM Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: CD-01

Matrix: (soil/water) SOIL Lab Sample ID: 286632

Sample wt/vol: 30.1 (g/mL) G Lab File ID: HA3704

% Moisture: 23. decanted: (Y/N) N Date Received: 03/28/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/29/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 04/08/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	43.	U
11104-28-2	Aroclor-1221	43.	U
11141-16-5	Aroclor-1232	43.	U
53469-21-9	Aroclor-1242	43.	U
12672-29-6	Aroclor-1248	43.	U
11097-69-1	Aroclor-1254	43.	U
11096-82-5	Aroclor-1260	43.	U

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CD-13

Lab Name: ICM Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: CD-01

Matrix: (soil/water) SOIL Lab Sample ID: 286633

Sample wt/vol: 30.1 (g/mL) G Lab File ID: HA3710

% Moisture: 23./ decanted: (Y/N) N Date Received: 03/28/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/29/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 04/09/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor-1016	43.	U
11104-28-2	Aroclor-1221	43.	U
11141-16-5	Aroclor-1232	43.	U
53469-21-9	Aroclor-1242	43.	U
12672-29-6	Aroclor-1248	43.	U
11097-69-1	Aroclor-1254	43.	U
11096-82-5	Aroclor-1260	43.	U

RFP No.: 2505

PO No.: 91620

CHAIN OF CUSTODY RECORD

WESTON MANAGERS DESIGNERS CONSULTANTS

SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT 68-W5-0019
Phone: 908-225-6116 Fax: 908-225-7037

Matrix Box No.:	Preservative Box No.:
1. Surface Water	1. HCl
2. Ground Water	2. HN03
3. Leachate	3. Na2SO4
4. Rinsate	4. H2SO4
5. Soil/Sediment	5. Other (Specify)
6. Oil	6. Ice Only
7. Waste	N. Not Preserved
8. Other (Specify)	* See Comments

Send verbal and written results to: Roy F. Weston, Inc., USEPA Region II START
Suite 201, 1090 King Georges Post Road, Edison, New Jersey 08837-3703
Attention: Smita Sumbaly, START Analytical Coordinator

Sample Number	Sample Collection MM/DD/YY/Time	Sample Matrix (Enter box #)	Conc. Low-L Med-M High-H	Sample Type Comp-C Grab-G	Sample Preserv. (Enter box #s)	RAS ANALYSIS VOA	BNA	PEST	PCBs	TAL	CN	RCRA ANALYSIS IGN	COR	REAC	OTHER
CD-01	3/28/98 (1105)	5	L/M	G	6				X						28626621
CD-02	(1105)	5	L/M	G	6				X						626 22
CD-03	(1110)	5	L/M	G	6				X						623
CD-04	(1140)	5	L/M	G	6				X						624
CD-05	(1145)	5	L/M	G	6				X						625
CD-06	(1150)	5	L/M	G	6				X						626
CD-07	(1200)	5	L/M	G	6				X						627
CD-08	(1205)	5	L/M	G	6				X						628
CD-09	(1210)	5	L/M	G	6				X						629
CD-10	(1215)	5	L/M	G	6				X						630
CD-11	(1220)	5	L/M	G	6				X						631
CD-12	(1225)	5	L/M	G	6				X						632
CD-13	(1230)	5	L/M	G	6				X						✓ 633

Comments: * EXTRA VOLUME FOR MS/MSD PROVIDED

Person Assuming Responsibility for Sample: HARLY MORADIA — Time Date (MM/DD/YY): 1235 3/28/98

Sample Number	Relinquished By:	Time	Date	Received By:	Reason for Change of Custody
ALL	Moradia	1500	3/28	Valerie Howland	LAB ANALYSIS
Sample Number	Relinquished By:	Time	Date	Received By:	Reason for Change of Custody
Sample Number	Relinquished By:	Time	Date	Received By:	Reason for Change of Custody

Roy F. Weston, Inc.
FEDERAL PROGRAMS DIVISION
In Association with Resource Applications, Inc.; R.E. Sarriera Associates, PRC Environmental Management, C.C. Johnson & Malhotra, P.C., and GRB Environmental Services, Inc.

TO: ERIC Wilson

FR: M. MAHNKOPF

DATE: 7/17/98